

Attorney Docket No. 000315

09/910,361

REMARKS/ARGUMENTS

Applicant, by this paper, adds new claims 17-19. Claims 1-19 are pending in the application, and are presented for consideration and allowance.

Discussion of Rejections Under 35 USC §103(a)

Claims 1-16 were rejected under 35 USC §103(a) as allegedly unpatentable over U.S. Patent No. 6,188,351 to Bloebaum (hereinafter Bloebaum). With respect to claims 1-16, and particularly claims 1, 3, 6, 9, 11, and 14, the Examiner concedes that Bloebaum does not teach where the code-phase search range is transmitted to the mobile station. However, the Examiner contends that "portable battery life depends on the amount of processing performed at the portable station therefore logically it is better for the system to perform complex calculations." *Office Action*, dated March 12, 2004 at pages 2-3. Additionally, the Examiner contends that "It is in the knowledge generally available to one of ordinary skill in the art that if the code-phase search range is determined in the base station instead of the mobile station, then the power consumption in the mobile station is greatly reduced." *Office Action*, dated December 16, 2004, at page 4.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be reasonable expectation of success. Finally, the prior art reference, or references when combined, must teach or suggest all of the claim limitations.

Applicant respectfully contends that a *prima facie* case of obviousness has not been established because there is no motivation to modify Bloebaum in the manner suggested by the Examiner. Additionally, the reference fails to teach each and every feature of the claims.

The Examiner provides a general motivation to reduce power consumption in a mobile station. However, the Examiner jumps to the conclusion that one would be motivated by the general desire to reduce power consumption to solve the specific problem of code-phase search range in the manner claimed by Applicant. The Examiner concludes that calculating the code-phase search range at the base station using the method of Bloebaum *necessarily* reduces

Attorney Docket No. 000315

09/910,361

the power consumption at the mobile station, and so one would be motivated to modify the teachings of Bloebaum in a manner that would result in calculating the code-phase search range at the base station. Applicant respectfully disagrees with this conclusion.

The Examiner concludes that one of ordinary skill in the art would use the general motivation of conserving power to perform the specific modification of calculating code-search range in a base station. The Examiner fails to provide any teaching that would provide one of ordinary skill in the art with a motivation to examine the particular features of calculating a code-phase search range at the base station when seeking to reduce power consumption. There is no indication that calculating the code-search range in the mobile station entails "complex calculations" that can be eliminated by modifying the reference. Indeed, the Examiner fails to take into account what additional signaling would be required when modifying the methods of Bloebaum to perform calculation of code-search range at the base station, and the effects of such additional signaling on the mobile station power consumption. Applicant respectfully requests the Examiner provide a reference or teaching that provides evidence that "It is in the knowledge generally available to one of ordinary skill in the art that if the code-phase search range is determined in the base station instead of the mobile station, then the power consumption in the mobile station is greatly reduced." *Office Action*, dated December 16, 2004, at page 4.

There is no reasonable expectation of success in performing the modification. There is no discussion in Bloebaum of the changes that are necessary to modify the system in the manner suggested by the Examiner. There is no indication that one would reasonable expect that modifying the teachings of Bloebaum would successfully result in the reduction of power consumption in the mobile station. Indeed, the Examiner fails to describe how modifying the teachings of Bloebaum would result in reduction in mobile station power consumption.

Bloebaum discloses that the base station sends the timing advance (TA) information to the mobile station. However, this signal is required by the mobile station even when no position location is performed. *See Bloebaum*, Col. 10, ll. 56-67. Thus, this signaling cannot be eliminated if Bloebaum could be modified to calculate the code-search range at the base station. Bloebaum does not discuss, and the Examiner does not address, what additional signaling would be required between the mobile station and the base station if Bloebaum were modified to calculate code-search range at the base station. Indeed, the mobile station might

Attorney Docket No. 000315

09/910,361

consume even *more* power if the additional signaling required the mobile station to transmit one or more additional messages. However, Applicant knows this and does not believe that this can be determined because there is no information to suggest what signals are required for the modification. Therefore, the Examiner cannot conclude that one would be motivated to modify the teachings of Bloebaum by the general desire to reduce power consumption at the mobile station.

Applicant thus believes that claims 1-16 are allowable at least for the reason that there is no motivation to modify Bloebaum in the manner suggested by the Examiner. Furthermore, there is no reasonable expectation of success that modifying the teachings of Bloebaum to in the manner suggested by the Examiner reduce the mobile station power consumption. There is nothing to suggest that such a modification would result in power savings. Applicant respectfully requests allowance of claims 1-16.

Bloebaum fails to teach each and every claimed limitation of all of Applicant's claims. Claim 1 includes calculating the code-search range with reference to "the wireless coverage area." Bloebaum discusses using the timing advance to determine a code-search range and does not describe using a wireless coverage area when calculating the code-search range. Bloebaum does not describe transmitting information relating to a wireless coverage area to the mobile station, nor does Bloebaum describe using wireless coverage area at the base station to determine a code-search range. Applicant respectfully requests reconsideration and allowance of claim 1. Claims 3, 9, and 11 include a similar feature and are believed to be allowable for the same reasons as provided for claim 1.

Claim 6 includes "means for obtaining a location reference for the GPS/wireless terminal unit." Claim 14 includes a similar feature. This feature is not taught nor suggested by Bloebaum. Bloebaum does not describe using a location reference of the GPS/wireless unit when calculating a code-search range. The Examiner fails to identify where Bloebaum discusses this feature. Thus, Applicant believes claims 6 and 14 to be allowable over Bloebaum.

Claims 2, 4-5, 7-8, 10, 12-13, and 15-16 depend from one of claims 1, 3, 6, 9, 11, and 14. Thus applicant respectfully request reconsideration and allowance of claims 2, 4-5, 7-8, 10, 12-13, and 15-16 at least for the reasons that they depend from allowable base claims.

Attorney Docket No. 000315

09/910,361

Discussion of New Claims

Applicant adds new claims 17-19. Support for claim 17 can be found in Applicant's specification. In particular, the specification at paragraphs [0061] through [0069] and Figures 6-7 disclose calculating a code-search range independent of a timing offset of the integrated GPS/wireless terminal unit.

Support for claim 19 can be found at paragraphs [0065] through [0069] and Figure 7 and paragraphs [0073] through [0076] and Figure 9. Figures 7 and 9 explicitly show an uncertainty area distinct from the base station location.

Applicant respectfully believes that the features of claims 17-19 are not found in the prior art references and respectfully request allowance of claims 17-19.

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested. Applicant is also filing a Request for Continued Examination herewith.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 858-845-8503.

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